

# IMAGE SENSOR WITH IMPROVED DYNAMIC RANGE BY APPLYING NEGATIVE VOLTAGE TO UNIT PIXEL

## ABSTRACT OF THE DISCLOSURE

The present invention is to provide an image sensor, including: a  
5 semiconductor substrate of a first conductive type: a peripheral circuit formed on a first  
region of the semiconductor substrate, wherein a ground voltage level is applied to the first  
region; a unit pixel array having a plurality of unit pixels formed on a second region of the  
semiconductor substrate, wherein the first region is isolated from the second region and  
wherein a negative voltage level is applied to the second region; and a negative voltage  
10 generator for providing the negative voltage for the second region.

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